DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: BIG BROOK BOG	Lake Area (ha):	15.01
Town: PITTSBURG	Maximum depth (m):	2.4
County: Coos	Mean depth (m):	1.4
River Basin: Connecticut		16500
Latitude: 45°09'48" N	Relative depth:	0.6
Longitude: 71°13'41" W	Shore configuration:	1.13
Elevation (ft): 1946	Areal water load (m/yr): 3	31.87
Shore length (m): 1550	Flushing rate (yr ⁻¹):	22.10
Watershed area (ha): 630.7	P retention coeff.:	0.42
<pre>% watershed ponded: 0.0</pre>	Lake type: natural w	w/dam

BIOLOGICAL:	6 February 1997	7 August 1996
DOM. PHYTOPLANKTON (% TOTAL) #1		DINOBRYON 40%
#2		CHRYSOSPHAERELLA 20%
#3		RHIZOSOLENIA 12%
PHYTOPLANKTON ABUNDANCE (units/mL)		
CHLOROPHYLL-A (µg/L)		7.85
DOM. ZOOPLANKTON (% TOTAL) #1		POLYARTHRA 34%
#2		NAUPLIUS LARVA 19%
#3		
ROTIFERS/LITER		179
MICROCRUSTACEA/LITER		116
ZOOPLANKTON ABUNDANCE (#/L)		340
VASCULAR PLANT ABUNDANCE		Common
SECCHI DISK TRANSPARENCY (m)		2.4 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		13.0
BACTERIA (E. coli, #/100 ml) #1		< 1
#2		
#3		

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermocline (m): None Hypolimnion volume (m³): None Anoxic volume (m³): None

CHEMICAL:		BIG BROOM		
	6 February 1997	7 2	August 199	96
DEPTH (m)		1.0		2.0
pH (units)		6.9		6.7
A.N.C. (Alkalinity)		10.0		8.2
NITRATE NITROGEN		< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN		0.68		0.44
TOTAL PHOSPHORUS		0.012		0.016
CONDUCTIVITY (µmhos/cm)		29.4		30.4
APPARENT COLOR (cpu)		65		75
MAGNESIUM		0.50		
CALCIUM		4.5		
SODIUM		< 1.0		
POTASSIUM	-	< 0.40		
CHLORIDE		< 2		< 2
SULFATE		3		3
TN : TP		57		28
CALCITE SATURATION INDEX		2.7		

All results in mg/L unless indicated otherwise

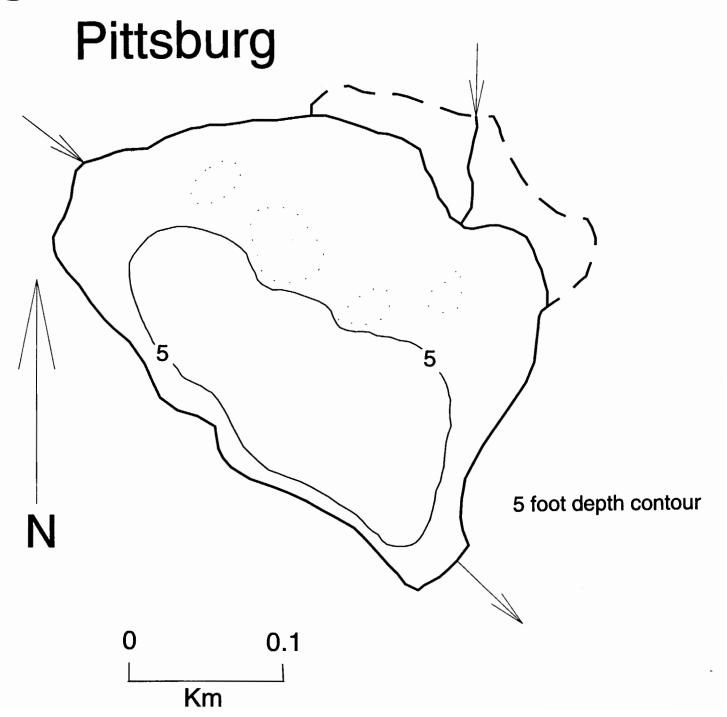
TROPHIC CLASSIFICATION: 1996

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	2	3	1	6	Meso.

COMMENTS:

- 1. AKA Big Brook Pond.
- 2. No motors are allowed on this pond.
- 3. This is a somewhat remote pond accessible by a 4-wheel drive road in the summer. It was not sampled in the winter.
- 4. This is a shallow, tea-colored but non-acid pond.
- 5. Otters, a great blue heron and two adult and two juvenile loons were observed.

Big Brook Bog



FIELD DATA SHEET

TOWN: PITTSBURG

LAKE: BIG BROOK BOG

DATE: 08/07/96 WEATHER: SUNNY, HOT, SLIGHT BREEZE

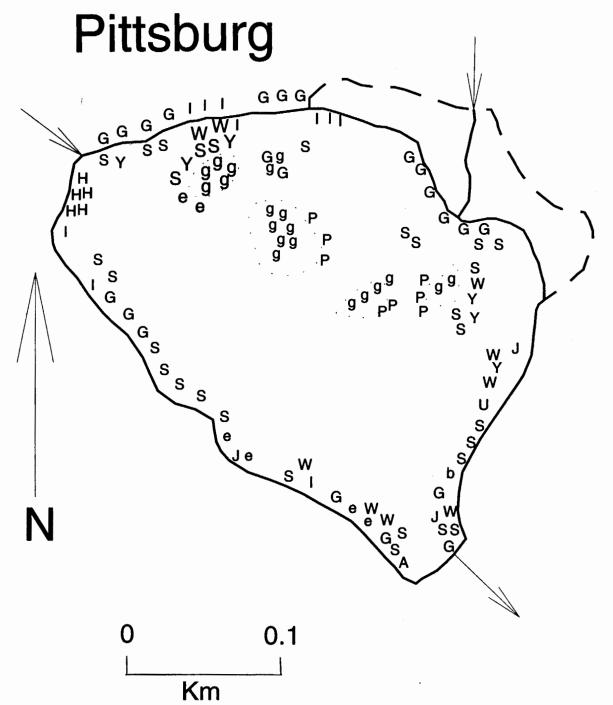
DATE: 06/07/96 WEATHER: SUNNY, HOT, SLIGHT BREEZE			IGHI BREEZE
DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
0.1	23.8	9.2	107 %
0.5	23.4	9.0	105 %
1.0	21.2	8.4	94 %
1.5	19.0	12.0	129 %
2.0	18.0	13.0	137 %
			-

SECCHI DISK (m): 2.4 VOB COMMENTS:

BOTTOM DEPTH (m): 2.4

TIME: 1130

*Dissolved oxygen values are in mg/L



AQUATIC PLANT SURVEY

LAK	E: BIG BROOK BOG	TOWN: PITTSBURG	DATE: 08/07/9	
Кеу	PLANT	NAME	ABUNDANCE	
кей	GENERIC	COMMON		
P	Pontederia cordata	Pickerelweed	Sparse	
G	Gramineae	Grass family	Common/Abun	
g	Myrica gale	Sweet gale	Abundant	
Ι	Iris	Iris	Sparse	
A	Sagittaria	Arrowhead	Sparse	
е	Eleocharis	Spike rush	Sparse	
Н	Equisetum	Horsetail	Sparse	
S	Sparganium	Bur reed	Common/Abun	
b	Scirpus	Bulrush	Sparse	
W	Potamogeton	Pondweed	Common	
J	Juncus	Rush	Sparse	
U	Utricularia	Bladderwort	Sparse	
Y	Nuphar	Yellow water lily	Sparse	
	·			
	-		·	

OVERALL ABUNDANCE: Common

GENERAL OBSERVATIONS:

- 1. Sterile thread-like leaves were abundant over the pond bottom and native milfoil were common along the bottom.
- 2. "Islands" of sweet gale were present along the northern half of the pond.